



Is My Class Green? Comparing Samples and Population

How to Get a Random Sample from CensusAtSchool

Go to the CensusAtSchool [Random Sampler](#) to download a sample.X

Reference year: (select year) **Sample size:** The same size as your class

Select questions: What actions do you take at home to conserve the environment

Location: Select location

Year level: (select a range of year levels)

To protect privacy there is a rule built into the sampler that the requested sample size cannot exceed 10% entered.

Question from the CensusAtSchool questionnaire: 'What actions do you take at home to conserve the environment?' Students answered yes or no to:

- 'My household has installed a water tank',
- 'My household has installed a water saving shower head',
- 'I take shorter showers',
- 'I turn off the tap while I brush my teeth',
- 'I turn off appliances (e.g. TV, computer, gaming consoles) at the power point' and
- 'My household recycles our rubbish'.

Below is a table showing the summary results from all of the students who completed CensusAtSchool in 2010.

Percentage of students who take actions in the home to conserve the environment by year level. Summary for 2010

Actions taken to conserve water	Percentage of "Yes" respondents by Year level								
	4 or below	5	6	7	8	9	10	11	12
My household has installed a water tank	45.0	38.4	37.1	42.6	39.5	40.6	40.6	43.4	38.0
My household has installed a water saving shower head	40.1	45.9	44.7	44.1	46.3	48.0	45.6	50.4	51.7
I take shorter showers	74.3	72.9	66.4	59.8	50.6	45.9	44.1	43.9	46.8
I turn off the tap while I brush my teeth	91.8	91.0	89.6	88.6	87.2	85.1	85.0	83.0	84.5
I turn off appliances	51.7	50.6	47.0	47.1	43.7	42.7	46.5	43.6	45.0

CensusAtSchool Random Sampler <http://www.cas.abs.gov.au/cgi-local/cassampler.pl>

Access other similar lessons at <http://www.abs.gov.au/censusatschool>



My household recycles our rubbish	79.8	82.5	82.1	80.7	82.3	79.9	78.1	82.1	77.7
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<http://www.abs.gov.au/websitedbs/cashome.nsf/51c9a3d36edfd0dfca256acb00118404/bec9728d241c8bc0ca25775700826917!OpenDocument#environment>

Task:

1. Conduct a class survey of the question 'What actions do you take at home to conserve the environment?' There is a table overleaf to help you. Your teacher could put a table on the board for you to copy.

2. Use your class data to complete the following table

Actions taken to conserve water	Tally of "Yes"	Tally of "No"	Total	Percent age of "Yes"	Percent age of "No"
My household has installed a water tank					
My household has installed a water saving shower head					
I take shorter showers					
I turn off the tap while I brush my teeth					
I turn off appliances (e.g. TV, computer, gaming consoles) at the power point					
My household recycles our rubbish					

3. Use the table provided at the top of the page (Percentage of students who take actions in the home to conserve the environment by year level. Use the Summary for 2010 to select summary data from the appropriate year level to match your class data. Create an appropriate graph comparing the percentage of 'yes' respondents between the national CensusAtSchool summary data and your class data.

4. Is your class green? Write a short paragraph explaining the differences and similarities between your class and the CensusAtSchool summary data.

5. If you took a random sample from CensusAtSchool, or you conducted another survey of a different class, do you think the results would differ from your class data? Explain.



Extension:

Take a random sample from CensusAtSchool and compare this random sample with your class data and the CensusAtSchool summary data.

Student Name		What actions do you take at home to conserve the environment?. yes/no					
		Installed water tank	Installed water saving shower head	Take shorter showers	Turn the tap off while brushing teeth	Turn off appliances	Recycle rubbish
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